

LIST OF PUBLICATIONS RELATED TO THESIS

1. Graphene oxide supported oxovanadium (IV) complex for catalytic peroxidative epoxidation of styrene: an eye- catching impact of solvent
Ravi Vithalani, Dikin Patel, Chetan K. Modi*, Narayan N. Som, Prafulla K. Jha
Appl. Organomet. Chem., 2020 (First online published- 22 January 2020).
DOI: 10.1002/aoc.5500. **I.F.: 3.259**
2. Enhancing the potency of surface hydroxyl groups of graphene oxide for selective oxidation of benzyl alcohol
Ravi Vithalani, Dikin Patel, Chetan K. Modi*, Narayan N. Som, Prafulla K. Jha, S. R. Kane
Diamond & Related Materials, 2018, **90**, 154-165. **I.F.: 2.290**

Book chapter

1. An Immense Uprising: Functionalization and Fine-Tuning of 2D Graphene Designed for Heterogeneous Catalysis to Make Things Greener
Chetan K. Modi*, **Ravi Vithalani**, Dikin Patel
Ch. No. 9, 2018, pp. 217-244
Book Title: Graphene Oxide: Advances in Research and Applications
Publisher: NOVA Science Publishers, USA
ISBN: 978-1-53614-169-6

LIST OF PUBLICATIONS NON-RELATED TO THESIS

1. Highly efficient FeNP-embedded hybrid bifunctional reduced graphene oxide for Knoevenagel condensation with active methylene compounds,
Dikin Patel, Chetan K. Modi*, **Ravi Vithalani**
New J. Chem., 2020, **44**, 2868-2881. **I.F.: 3.069**
2. Harnessing the N-Dopant Ratio to Carbon Quantum Dots for Enhancing the Power Conversion Efficiency of Solar Cell

Bhavita Mistry, Hiren K. Machhi, **Ravi S. Vithalani**, Dikin S. Patel, Chetan K. Modi*, Meha Prajapati, Kiran R. Surati, Saurabh S. Soni*, Prafulla K. Jha, Sanjeev R. Kane

Sustainable Energy Fuels, 2019, **3**, 3182-3190. **I.F.: 4.912**

3. Zeolite-Y entrapped metallo-pyrazolone complexes as heterogeneous catalysts: Synthesis, catalytic aptitude and computational investigation
Chetan K. Modi*, **Ravi S. Vithalani**, Dikin S. Patel, Narayan N. Som, Prafulla K. Jha

Micropor. Mesopor. Mater., 2018, **261**, 275-285. **I.F.: 4.182**

4. Ionic liquid infiltrated within metal loaded zeolites for Baeyer–Villiger oxidation reaction under solvent-free condition

Chetan K. Modi*, Sabeeyabanu Panwala, **Ravi Vithalani**, Dikin Patel

J. Porous Mater., 2018, **25(3)**, 871-883. **I.F.: 1.947**

5. Baeyer-Villiger oxidation of cyclopentanone over zeolite Y entrapped transition metal- Schiff base complexes

Chetan K. Modi*, Naresh Solanki, **Ravi Vithalani**, Dikin Patel

Appl. Organomet. Chem., 2018, **32(1)**, e3910. **I.F.: 3.259**

Review Article

1. Glowing photoluminescence Carbon Nanodots: Current State and Future Perspectives

Ravi Vithalani, Dikin Patel, Chetan K. Modi*, Devesh H. Suthar

J. Mater. Sci., (Revised) (MS No.: JMSC-D-20-00379) **I.F.: 3.442**

LIST OF CONFERENCES/ SEMINARS/ WORKSHOPS

1. “Catalytic epoxidation of styrene over go supported oxovanadium (IV) complex: Elucidating the mechanistic route through DFT study” in International Conference on “7th Asian Network for Natural & Unnatural materials” (ANNUM – VII) organized by Department of Chemistry, Gujarat University, Ahmadabad on 27-29 September 2019 (**Poster**).
2. “Surface hydroxyl group modified graphene oxide as heterogeneous catalysts for the epoxidation of styrene” in National symposium on Advances in Chemical Research (ACR) organized by Department of Chemistry, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara on 24th February 2019 (**Poster**).
3. “DFT assisted investigation of selective oxidation of benzyl alcohol over amine substituted graphene oxide as heterogeneous catalysts” in International Conference on Advances in Chemical Science and Allied Fields of Science, Health, Education and Environment (ACAEE) organized by Carrier College, Bhopal in collaboration with Royal Society of Chemistry, London, North India Section & Global Research & Welfare Society (GRWS), Bhopal on 8-10 March 2018 (**Oral**).
4. “Covalent tethering of transition metal complexes onto graphene oxide nanosheets heterogeneous catalysts” in International Conference on Science: Emerging scenario & Future Challenges (SESFC) organized by Him Science Congress Association, Dharamshala on 11-12th June 2016 (**Oral**).
5. A seminar on Applications of X-Ray Techniques - XRF, XPS, Auger, organized by Indian Society of Analytical Scientists Baroda Chapter in Association with Department of Chemistry, The Maharaja Sayajirao University of Baroda and Bruker India Scientific Pvt Ltd on 9th March 2019. (**Attended**).
6. “Encapsulation of ionic liquid skeleton within metal loaded zeolites via ship-in-a-bottle synthesis for Baeyer-Villiger oxidation reaction under solvent-free condition” in National Seminar on Frontiers in Heterogeneous Catalysis (HETCAT) organized by Department of Chemistry, Faculty of

Science, The Maharaja Sayajirao University of Baroda, Vadodara on 10th December 2016 (**Poster**).

7. National seminar on Recent Scenario in Science and Technology (RSST), organized by Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda, Vadodara on 27th February 2016. (**Attended**)